The following is a quotation of 37 CFR 1.84, "Standards for drawings":

(p) Numbers, letters, and reference characters.
(1) Reference characters (numerals are preferred), sheet numbers, and view numbers must be plain and legible, and must not be used in association with brackets or inverted commas, or enclosed within outlines, e.g., encircled. They must be oriented in the same direction as the view so as to avoid having to rotate the sheet. Reference characters should be arranged to follow the profile of the object depicted.
(2) The English alphabet must be used for letters, except where another alphabet is customarily used, such as the Greek alphabet to indicate angles, wavelengths, and mathematical formulas.
(3) Numbers, letters, and reference characters must measure at least.32 cm. (1/8 inch) in height. They should not be placed in the drawing so as to interfere with its comprehension. Therefore, they should not cross or mingle with the lines. They should not be placed upon hatched or shaded surfaces. When necessary, such as indicating a surface or cross section, a reference character may be underlined and a blank space may be left in the hatching or shading where the character occurs so that it appears distinct.
(4) The same part of an invention appearing in more than one view of the drawing must always be designated by the same reference character, and the same reference character must never be used to designate different parts.
(5) Reference characters not mentioned in the description shall not appear in the drawings. Reference characters mentioned in the description must appear in the drawings.
(q) Lead lines . Lead lines are those lines between the reference characters and the details referred to. Such lines may be straight or curved and should be as short as possible. They must originate in the immediate proximity of the reference character and extend to the feature indicated. Lead lines must not cross each other. Lead lines are required for each reference character except for those which indicate the surface or cross section on which they are placed. Such a reference character must be underlined to make it clear that a lead line has not been left out by mistake. Lead lines must be executed in the same way as lines in the drawing. See paragraph (l) of this section.
(r) Arrows . Arrows may be used at the ends of lines, provided that their meaning is clear, as follows:
(1) On a lead line, a freestanding arrow to indicate the entire section towards which it points;
(2) On a lead line, an arrow touching a line to indicate the surface shown by the line looking along the direction of the arrow; or
(3) To show the direction of movement.

The drawings are objected to as failing to comply with 37 CFR 1.84(r)(1) because the meaning of the arrows used at the ends of the following reference character lead lines is unclear because the corresponding

description discloses that the reference characters do not indicate the entire section towards which they point:

FIG. 16: 91

FIG. 17: 121

FIG. 18: 121

FIG. 19: 121

FIG. 19: 121

The drawings are objected to as failing to comply with 37 CFR 1.84(r)(2) because the meaning of the arrows used at the ends of the following reference character lead lines is unclear because the corresponding description discloses that the reference characters do not indicate the surface shown by the line looking along the direction of the arrow:

FIGS. 1-3: 1a

FIGS. 4 and 5: 5

FIGS. 14 and 16: 1b

FIG. 15: 91

FIG. 18: 1d

The drawings are objected to as failing to comply with 37 CFR 1.84(r)(2) because the meaning of the arrows used at the ends of the following reference character lead lines is unclear because the description discloses

that the reference characters do not indicate the surface shown by the line looking along the direction of the arrow:

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters appear to have been used to designate the same part. Specifically:

FIG. 17: 121 and 1c

FIG. 18: 121 and 1d

FIG. 19: 121 and 1e

FIG. 19: 121 and 1f

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because the same reference character is used to designate different parts. Specifically:

FIG. 16: 91

Specifically, the reference character 91 lead line with the freestanding arrow indicates the entire section towards which it points and the other reference character 91 lead lines indicate less than the entire sections.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the

filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The disclosure is objected to because of the following informalities:

Paragraph 3 discloses:

> In the above example, a region of the base plate in which the adhesive holding layer is provided for adhering an FPC thereto is referred to as an "adhesive holding region", as opposed to the adhesive holding layer itself which is provided in the adhesive holding region.

However, the following disclosures appear to be inconsistent with the paragraph 3 disclosure because the adhesive holding layer itself, as opposed to the region of the base plate in which the adhesive holding layer is provided, appears to be referred to as the adhesive holding region:

Paragraph 6:

> [A]n adhesive holding region which is composed of two adhesive holding layers.

Paragraph 11:

> The first adhesive holding region 21 and the second adhesive holding region 22 are provided within the same plane so as to form fractions of the surface of the adhesive holding layer 12, and are composed of the same adhesive material.

Paragraph 32:

> As described above, the first adhesive holding region 21 and the second adhesive holding region 22 of the adhesive holding layer 12 of the pallet 1a

are imparted with different tackinesses based on different surface coarsenesses.

Paragraph 33:

Thus, the adhesive holding layer 12 having the first adhesive holding region 21 and the second adhesive holding region 22 is formed.

Paragraph 59:

Thus, the first adhesive holding region 21 and the second adhesive holding region 22 are formed on the adhesive material 12a with the intended respective undulating patterns and the intended level difference therebetween.

Paragraph 63:

Through a press step, the first adhesive holding region 21 and the second adhesive holding region 22 are formed on the adhesive material 12a with the intended respective undulating patterns and the intended level difference therebetween.

Paragraph 68:

The first adhesive holding region 21 and the second adhesive holding region 22 may be respectively formed on the surfaces of different adhesive materials. However, it is preferable that the first and second adhesive holding regions 21 and 22 are both on the surface of the same adhesive material in order to facilitate the formation thereof.

Claims 30 and 32:

wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material.

This ambiguity results in confusing disclosure throughout the disclosure, including the drawings and the claims, and applicant is encouraged to provide clearer and more consistent written description antecedent basis for any related claim language.

At paragraph 13, Table 1, the meaning of the language "mirror face" is unclear. Also, the meaning of the values "1 S" and "1.6 S" is unclear.

Claims 28 and 29 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

To further clarify, claim 27 recites "a first adhesive holding region which has first surface coarseness," and, "a second adhesive holding region which has second surface coarseness."

Furthermore, as disclosed throughout the entirety of the specification, e.g., at paragraph 12, "the surface coarseness of the adhesive material," in the holding regions, the surface coarseness is a property of the adhesive material. Therefore, claim 27 is inherently comprising an adhesive material inherently provided on said main body and said adhesive holding regions being on a surface of said adhesive material. Also, the first and second adhesive holding regions of claim 27 are inherently within one area (at least the one area inherently comprising the first and second adhesive holding regions) of the adhesive material.

Applicant is advised that should claim 44 be found allowable, claim 27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

Should claim 39 be found allowable, claim 47 will be objected to under 37 CFR 1.75 as being a duplicate thereof.

Should claim 42 be found allowable, claim 49 will be objected to under 37 CFR 1.75 as being a duplicate thereof.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

To further clarify, despite the slight difference in preambular wording between claim 27 and claim 44: "substrate holder for holding a circuit board" and "pallet for carrying a circuit board," respectively, claim 27 does not differ substantially from claim 44, as required by 37 CFR 1.75(b) because a pallet for carrying a circuit board is a substrate holder for holding a circuit board.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 51 is rejected under 35 U.S.C. 101 as being non-statutory because they improperly embrace or overlap two different statutory classes of invention, namely, product and process of using the product, which statutory classes are set forth only in the alternative in 35 U.S.C. 101. See MPEP 2173.05(p)II and:

> [I]t is clear that appellant's independent claim 2 is intended to embrace or overlap *two* different statutory classes of invention set forth in 35 USC 101. In our view, a claim of this type is precluded by the express language of 35 USC 101. (Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990))

Also claim 51 is rejected under 35 U.S.C. 112, second paragraph, because they are directed to both product and process of using the product. As a result, the scope of the claims cannot be determined:

> [A] single claim which purports to be both a product or machine and a process is ambiguous and is properly rejected under 35 USC 112, second paragraph, for failing to particularly point out and distinctly claim the invention. (Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990)
>
> [It] is unclear whether infringement of claim 25 occurs when one creates a system that allows the user to change the predicted transaction information or accept the displayed transaction, or whether infringement occurs when the user actually uses the input means to change transaction information or uses the input means to accept a displayed transaction. Because claim 25 recites both a system and the method for using that system, it does not apprise a person of ordinary skill in the art of its scope, and it is invalid under section 112, paragraph 2; and MPEP 2173.05(p)II. (IPXL Holdings v.Amazon.com, Inc., 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005))

Specifically, claim 51 is directed to a product but the following language appears to be directed to a process of using the product:

Re claim 51: the adhesive holding layer remains on the main body upon separation of a circuit board from the holding surface.

To paraphrase IPXL supra, it is unclear whether infringement of claim 51 occurs when one provides the substrate holder wherein the adhesive holding layer is formed on the main body, or whether infringement occurs when the user actually uses the substrate holder so that the adhesive holding layer remains on the main body upon separation of a circuit board from the holding surface.

To this end, it is noted that the scope of the substrate holder of claim 45 is not limited to a circuit board structure but only to the intended use of the substrate holder for a circuit board.

Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is ambiguously insufficient antecedent basis for the following claim language:

Re claim 51: a circuit board.

To further clarify, it is unclear if the antecedent basis for the claim 51 limitation "a circuit board" is the claim 45 language "a circuit board."

In the rejections infra, generally, reference labels are recited only for the first recitation of identical claim elements.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 27-30, 32, 39, 40 and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kuhns (20040119593), Adams (20030031819), Sher (6197397) and Nishikawa (JP7074497).

> MPEP 2111.01 [R-5] Plain Meaning
>
> I. THE WORDS OF A CLAIM MUST BE GIVEN THEIR "PLAIN

MEANING" UNLESS **>SUCH MEANING IS INCONSISTENT WITH< THE SPECIFICATION

**> Although< claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination [emphasis added].** During examination, the claims must be interpreted as broadly as their terms reasonably allow. In re American Academy of Science Tech Center, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004) (The USPTO uses a different standard for construing claims than that used by district courts; during examination the USPTO must give claims their broadest reasonable interpretation >in light of the specification<.). This means that the words of the claim must be given their plain meaning unless **>the plain meaning is inconsistent with< the specification. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (discussed below); Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004) (Ordinary, simple English words whose meaning is clear and unquestionable, absent any indication that their use in a particular context changes their meaning, are construed to mean exactly what they say. Thus, "heating the resulting batter-coated dough to a temperature in the range of about 400°F to 850°F" required heating the dough, rather than the air inside an oven, to the specified temperature.). **

**>II. IT IS IMPROPER TO IMPORT CLAIM LIMITATIONS FROM THE SPECIFICATION**

**"Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim [emphasis added].** For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment." Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004). See also Liebel-Flarsheim Co. v. Medrad Inc., 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004)(discussing recent cases wherein the court expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment);< E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) ("Interpretation of descriptive statements in a patent's written description is a difficult task, as an inherent tension exists as to whether a statement is a clear lexicographic definition or a description of a preferred embodiment. The problem is to interpret claims in view of the specification' without unnecessarily importing limitations from the specification into the claims."); Altiris Inc. v. Symantec Corp., 318 F.3d 1363, 1371, 65 USPQ2d 1865, 1869-70 (Fed. Cir. 2003) (Although the specification discussed only a single embodiment, the court held that it was improper to read a specific order of steps into method claims where, as a matter of logic or grammar, the language of the method claims did not impose a specific order on the performance of the method steps, and the specification did not directly or implicitly require a particular order). See also paragraph *>IV.<, below. **>When< an element is claimed using language falling under the scope of 35 U.S.C. 112, 6th paragraph (often broadly referred to as means or step plus function language)**, the specification must be consulted to

determine the structure, material, or acts corresponding to the function recited in the claim. In re Donaldson, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994) (see MPEP § 2181- § 2186). In In re Zletz, supra, the examiner and the Board had interpreted claims reading "normally solid polypropylene" and "normally solid polypropylene having a crystalline polypropylene content" as being limited to "normally solid linear high homopolymers of propylene which have a crystalline polypropylene content." The court ruled that limitations, not present in the claims, were improperly imported from the specification. See also In re Marosi, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983) ("Claims are not to be read in a vacuum, and limitations therein are to be interpreted in light of the specification in giving them their broadest reasonable interpretation'." 710 F.2d at 802, 218 USPQ at 292 (quoting In re Okuzawa, 537 F.2d 545, 548, 190 USPQ 464, 466 (CCPA 1976)) (emphasis in original). The court looked to the specification to construe "essentially free of alkali metal" as including unavoidable levels of impurities but no more.). Compare In re Weiss, 989 F.2d 1202, 26 USPQ2d 1885 (Fed. Cir. 1993) (unpublished decision - cannot be cited as precedent) (The claim related to an athletic shoe with cleats that "break away at a preselected level of force" and thus prevent injury to the wearer. The examiner rejected the claims over prior art teaching athletic shoes with cleats not intended to break off and rationalized that the cleats would break away given a high enough force. The court reversed the rejection stating that when interpreting a claim term which is ambiguous, such as "a preselected level of force", we must look to the specification for the meaning ascribed to that term by the inventor." The specification had defined "preselected level of force" as that level of force at which the breaking away will prevent injury to the wearer during athletic exertion.**)

*>III. < "PLAIN MEANING" REFERS TO THE ORDINARY AND CUSTOMARY MEANING GIVEN TO THE TERM BY THOSE OF ORDINARY SKILL IN THE ART

"[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Phillips v. AWH Corp., *>415 F.3d 1303, 1313<, 75 USPQ2d 1321>, 1326< (Fed. Cir. 2005) (en banc). Sunrace Roots Enter. Co. v. SRAM Corp., 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003); Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003)("In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art."). It is the use of the words in the context of the written description and customarily by those skilled in the relevant art that accurately reflects both the "ordinary" and the "customary" meaning of the terms in the claims. Ferguson Beauregard /Logic Controls v. Mega Systems, 350 F.3d 1327, 1338, 69 USPQ2d 1001, 1009 (Fed. Cir. 2003) (Dictionary definitions were used to determine the ordinary and customary meaning of the words "normal" and "predetermine" to those skilled in the art. In construing claim terms, the general meanings gleaned from reference sources, such as dictionaries, must always be compared against the use of the terms in context, and the intrinsic record must always be consulted to identify which of the different possible dictionary meanings is most consistent with the use of the words by the inventor.); ACTV, Inc. v. The Walt Disney Company, 346 F.3d 1082, 1092, 68 USPQ2d 1516, 1524 (Fed. Cir. 2003)

(Since there was no >express< definition given for the term "URL" in the specification, the term should be given its broadest reasonable interpretation >consistent with the intrinsic record< and take on the ordinary and customary meaning attributed to it by those of ordinary skill in the art; thus, the term "URL" was held to encompass both relative and absolute URLs.); and E-Pass Technologies, Inc. v. 3Com Corporation, 343 F.3d 1364, 1368, 67 USPQ2d 1947, 1949 (Fed. Cir. 2003) (Where no explicit definition for the term "electronic multi-function card" was given in the specification, this term should be given its ordinary meaning and broadest reasonable interpretation; the term should not be limited to the industry standard definition of credit card where there is no suggestion that this definition applies to the electronic multi-function card as claimed, and should not be limited to preferred embodiments in the specification.). The ordinary and customary meaning of a term may be evidenced by a variety of sources, >including "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art."< Phillips v. AWH Corp., *>415 F.3d at 1314<, 75 USPQ2d **>at 1327.< If extrinsic reference sources, such as dictionaries, evidence more than one definition for the term, the intrinsic record must be consulted to identify which of the different possible definitions is most consistent with applicant's use of the terms. Brookhill-Wilk 1, 334 F. 3d at 1300, 67 USPQ2d at 1137; see also Renishaw PLC v. Marposs Societa ' per Azioni, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998) ("Where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meanings.") and Vitronics Corp. v. Conceptronic Inc., 90 F.3d 1576, 1583, 39 USPQ2d 1573, 1577 (Fed. Cir. 1996) (construing the term "solder reflow temperature" to mean "peak reflow temperature" of solder rather than the "liquidus temperature" of solder in order to remain consistent with the specification.). If more than one extrinsic definition is consistent with the use of the words in the intrinsic record, the claim terms may be construed to encompass all consistent meanings. ** See *>e.g.,< Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342, 60 USPQ2d 1851, 1854 (Fed. Cir. 2001)(explaining the court's analytical process for determining the meaning of disputed claim terms); Toro Co. v. White Consol. Indus., Inc., 199 F.3d 1295, 1299, 53 USPQ2d 1065, 1067 (Fed. Cir. 1999)("[W]ords in patent claims are given their ordinary meaning in the usage of the field of the invention, unless the text of the patent makes clear that a word was used with a special meaning."). Compare MSM Investments Co. v. Carolwood Corp., 259 F.3d 1335, 1339-40, 59 USPQ2d 1856, 1859-60 (Fed. Cir. 2001) (Claims directed to a method of feeding an animal a beneficial amount of methylsulfonylmethane (MSM) to enhance the animal's diet were held anticipated by prior oral administration of MSM to human patients to relieve pain. Although the ordinary meaning of "feeding" is limited to provision of food or nourishment, the broad definition of "food" in the written description warranted finding that the claimed method encompasses the use of MSM for both nutritional and pharmacological purposes.); and Rapoport v. Dement, 254 F.3d 1053, 1059-60, 59 USPQ2d 1215, 1219-20 (Fed. Cir. 2001) (Both intrinsic evidence and the plain meaning of the term "method for treatment of sleep apneas" supported construction of the term as being limited to treatment of the underlying sleep apnea disorder itself, and not encompassing treatment of anxiety and other secondary symptoms related to sleep apnea.).

It is noted that, in the examination of the claims herein, the meaning of the term "tackiness" is limited to applicant's explicit definition for the term "tackiness" disclosed at paragraph 10:

> As used herein, a "tackiness" is a value corresponding to a force which is required to peel off an object which has adhered to the adhesive holding layer under certain conditions, and thus serves as a measure of adhesion.

At paragraphs 28-33, 40-45, 52, 56 and 65, Kuhns discloses the following:

Re claim 27: A substrate holder for holding a circuit board, comprising: a main body "liner"; and a holding surface formed on the main body for allowing a circuit board 10 to adhere to the holding surface, wherein the holding surface includes: a first adhesive 19a holding region which has inherent first surface coarseness and is operable to hold the circuit board with a first tackiness ("permanently tacky" and "adhesive strength") which inherently corresponds to the first surface coarseness; and a second adhesive holding region 19b which has inherent second surface coarseness and is operable to hold the circuit board with a second tackiness which inherently corresponds to the second surface coarseness and is different from the first tackiness "the sticker 20 may include any number of different portions of adhesives with differing or similar adhesive strengths", said first and second adhesive holding regions being coplanar and capable of holding the circuit board in cooperation; wherein the first adhesive holding region

and the second adhesive holding region are arranged parallel to the surface of said main body; a tackiness between the first adhesive holding region and the main body and a tackiness between the second adhesive holding region and the main body "liner affixed to the adhesive layer"; wherein the second adhesive holding region is partially surrounded by the first adhesive holding region.

Re claim 28: The substrate holder of claim 27, and further comprising an adhesive material provided on said main body, said first adhesive holding region and said second adhesive holding region being on a surface of said adhesive material.

Re claim 29: The substrate holder of claim 28, wherein the first adhesive holding region and the second adhesive holding region are within one area of the adhesive material on said main body.

Re claim 39: The substrate holder of claim 27, wherein the first tackiness is less than the second tackiness.

Re claims 42 and 49: The substrate holder of claim 27, wherein the holding surface comprises a plurality of sets of the first adhesive holding region and the second adhesive holding region ("at least two different portions 19a, 19b with varying adhesive strengths" and "any number of different portions of adhesives with differing or similar adhesive strengths").

Re claim 44: A pallet for carrying a circuit board comprising: a main body "liner"; and a holding surface formed on the main body for allowing a circuit board 10 to adhere to the holding surface, wherein the holding surface includes: a first adhesive 19a holding region which has inherent first surface coarseness and is operable to hold the circuit board with a first tackiness ("permanently tacky" and "adhesive strength") which inherently corresponds to the first surface coarseness; and a second adhesive holding region 19b which has inherent second surface coarseness and is operable to hold the circuit board with a second tackiness which inherently corresponds to the second surface coarseness and is different from the first tackiness "the sticker 20 may include any number of different portions of adhesives with differing or similar adhesive strengths", said first and second adhesive holding regions being coplanar and capable of holding the circuit board in cooperation; wherein the first adhesive holding region and the second adhesive holding region are arranged parallel to the surface of said main body; a tackiness between the first adhesive holding region and the main body and a tackiness between the second adhesive holding region and the main body "liner affixed to the adhesive layer"; wherein the second adhesive holding region is partially surrounded by the first adhesive holding region.

Re claim 45: A substrate holder for holding a circuit board, comprising: a main body; and an adhesive holding layer on the main body having a

holding surface for allowing a circuit board to adhere to the adhesive holding layer, wherein the holding surface includes: a first adhesive holding region which has first surface coarseness and is operable to hold the circuit board with a first tackiness which corresponds to the first surface coarseness; and a second adhesive holding region which has second surface coarseness and is operable to hold the circuit board with a second tackiness which corresponds to the second surface coarseness and is different from the first tackiness, said first and second adhesive holding regions being coplanar and capable of holding the circuit board in cooperation; wherein the first adhesive holding region and the second adhesive holding region are arranged parallel to the surface of said main body; and wherein the second adhesive holding region is partially surrounded by the first adhesive holding region.

Re claim 47: The substrate holder of claim 27, wherein the first tackiness is less than the second tackiness.

The following is further clarified:

Re claims 27, 44 and 45: adhesive 19a which has inherent first surface coarseness with a first tackiness which inherently corresponds to the first surface coarseness; and a second adhesive 19b which has inherent second surface coarseness with a second tackiness which inherently corresponds to the second surface coarseness.

Specifically, adhesives 19a and 19b have inherent surface coarseness because applicant discloses that the property "surface coarseness" is substantially synonymous with the property of surface texture, e.g., at paragraph 13, Table 1, "mirror face," "1 S" and "1.6 S"; and surface texture is an inherent property of adhesives 19a and 19b. In addition, as admitted by applicant, e.g., paragraph 12, "tackiness increases with reduced surface coarseness," therefore, the first tackiness inherently corresponds to the first surface coarseness and the second tackiness inherently corresponds to the second surface coarseness.

However, Kuhns does not appear to explicitly disclose the following:

Re claims 27 and 44: wherein both the tackiness between the first adhesive holding region and the main body and the tackiness between the second adhesive holding region and the main body are larger than the first tackiness and the second tackiness.

Nonetheless, it would have been obvious to provide this/these relative tackiness size dimensional limitation(s) because it has been held that mere size dimensional limitations, including "the mere change of the relative size of the co-acting members of a known combination," are prima facie obvious absent a disclosure, as here, that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical:

> [A]ppellant does not contend that the combination of a magnetic fastener and an instrument having a magnetic head such as a tack and a magnetic

> hammer is new but that his particular combination is patentable because his magnetic tool is of substantially the same dimensions as the disk. … It is well established that the mere change of the relative size of the co-acting members of a known combination will not endow an otherwise unpatentable combination with patentability. Electric Cable Joint Co. v. Brooklyn Edison Co., Inc., 292 U.S. 69, 78 L.Ed. 1131, 54 S.Ct. 586, 21 USPQ 1 ; In re Irmscher, 36 CCPA 767, 171 F.2d 303, 80 USPQ 136 ; In re Bennett, 17 CCPA 1113, 40 F.2d 755, 5 USPQ 173. (In re TROIEL, 124 USPQ 502 (C.C.P.A. 1960))
>
> We do not feel that this limitation is patentably significant since it at most relates to the size of the article under consideration which is not ordinarily a matter of invention. In re Yount, 36 C.C.P.A. (Patents) 775, 171 F.2d 317, 80 USPQ 141. (In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955))

See also In re Kirke, 17 C.C.P.A. (Patents) 1121, 40 F.2d 765, 5 USPQ 539; In re Rinehart, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Also, as cited, Kuhns discloses that the tackiness between the first adhesive holding region and the main body "liner affixed to the adhesive layer" and the tackiness between the second adhesive holding region and the main body "liner affixed to the adhesive layer" and the first tackiness ("permanently tacky" and "adhesive strength") and second tackiness "the sticker 20 may include any number of different portions of adhesives with differing or similar adhesive strengths" is a/are result effective variable(s).

Therefore, it would have been obvious to try variations of this/these result effective variable(s), including the claimed variation(s) because:

> [T]he court erred in concluding that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try. … The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was 'obvious to try.' … [A] person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. … [T]he fact that a combination was obvious to try might show that it was obvious under §103. (KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007))

See also Pfizer Inc. v. Apotex Inc., 82 USPQ2d 1852 (Fed. Cir. 2007); In re Kubin, 90 USPQ2d 1417 (Fed. Cir. 2009); In re Aller, Lacey, and Hall, 105 USPQ 233 (C.C.P.A. 1955).

Applying the same legal precedent, it also would have been obvious to try this/these particular claimed tackiness dimension(s) because a change in tackiness dimension would have been a known option within the technical grasp of a person of ordinary skill in the art.

Moreover, as reasoned from well established legal precedent, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and optimization to choose the particular claimed tackiness limitation(s) because applicant has not disclosed that, in view of the applied prior art, the limitation(s) is/are for a particular unobvious purpose, produce(s) an unexpected result, or is/are otherwise critical. For that matter, applicant has not disclosed that the particular limitation(s) is/are for **any** purpose or

produce(s) **any** result. Indeed, it has been held that optimization of parameters and range limitations is prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical:

> Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." (See MPEP 2144.05(II))

Also see In re Aller, 220 F.2d 454, 105 USPQ 233, 235 (CCPA 1955); In re Hoeschele, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969), Merck & Co. Inc. v. Biocraft Laboratories Inc., 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989), and In re Kulling, 897 F.2d 1147, 14 USPQ2d 1056 (Fed. Cir. 1990).

> Applicant can rebut a prima facie case of obviousness based on overlapping ranges by showing the criticality of the claimed range. "The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. . . . In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). (MPEP 2144.05(III))

See MPEP § 716.02 - § 716.02(g) for a discussion of criticality and unexpected results.

Still further, it would have been obvious to try wherein both the tackiness between the first adhesive holding region and the main body and

the tackiness between the second adhesive holding region and the main body are larger than the first tackiness and the second tackiness because a person of ordinary skill would be motivated to solve the problem of providing the tackiness and there are a finite number of readily identified, predictable solutions; namely, providing each of the relative tackinesses to be smaller, equal to or larger; and:

> [T]he court erred in concluding that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try. … The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was "obvious to try." … When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. … [T]he fact that a combination was obvious to try might show that it was obvious under §103. (KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007))

See also, Pfizer Inc. v. Apotex Inc., 82 USPQ2d 1852 (Fed. Cir. 2007) and In re Kubin, 90 USPQ2d 1417 (Fed. Cir. 2009).

Similarly, the genus of the relative tackinesses would inherently anticipate the species wherein both the tackiness between the first adhesive holding region and the main body and the tackiness between the second adhesive holding region and the main body are larger than the first tackiness and the second tackiness because the genus contains a relatively small number of species, and one skilled in the art would at once envisage each species of the genus:

> [I]t has been held that a prior art genus containing only 20 compounds and a limited number of variations in the generic chemical formula inherently anticipated a claimed species within the genus because "one skilled in [the] art would... [at once] envisage each member" of the genus. In re Petering, 301 F.2d 676, 681, 133 USPQ 275, 280 (CCPA 1962) (emphasis in original). (MPEP 2144.08II4(a))

Also, Kuhns does not appear to explicitly disclose the following:

Re claim 30: wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material.

Re claim 32: wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material.

Re claim 46: wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material.

Regardless, it would have been obvious to try a same adhesive material because a person of ordinary skill would be motivated to solve the problem of providing adhesive material and there are a finite number (2) of readily identified, predictable solutions; namely, a same and a different adhesive material; and:

> [T]he court erred in concluding that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try. … The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was "obvious to try." … When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. … [T]he fact that a combination was obvious to try might show that it was obvious under §103. (KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007))

See also, Pfizer Inc. v. Apotex Inc., 82 USPQ2d 1852 (Fed. Cir. 2007) and In re Kubin, 90 USPQ2d 1417 (Fed. Cir. 2009).

Similarly, the genus of adhesive materials would inherently anticipate the species of a same adhesive material because the genus contains only two species; namely, the species of a same and a different adhesive material, and one skilled in the art would at once envisage each species of the genus:

> [I]t has been held that a prior art genus containing only 20 compounds and a limited number of variations in the generic chemical formula inherently anticipated a claimed species within the genus because "one skilled in [the] art would... [at once] envisage each member" of the genus. In re Petering, 301 F.2d 676, 681, 133 USPQ 275, 280 (CCPA 1962) (emphasis in original). (MPEP 2144.08II4(a))

However, Kuhns does not appear to explicitly disclose the following:

Re claim 27, 44 and 45: the second adhesive holding region is surrounded by the first adhesive holding region.

Still, as applied supra, Kuhns discloses the following:

Re claim 27, 44 and 45: the second adhesive holding region is partially surrounded by the first adhesive holding region.

Furthermore, at paragraphs 22-33, Adams discloses that wherein a second adhesive holding region 28 is partially surrounded by a first adhesive holding region 30 and wherein a second adhesive holding region, inner "spiral" "in the center of the label" is surrounded by a first adhesive holding

region, outer "spiral" "towards the edges of the label," illustrated in Figure 7, are alternatives and equivalents.

Therefore, as reasoned from well established legal precedent, it would have been obvious to substitute or combine the first and second holding region of Adams for or with the first and second holding region of Kuhns.

> See In re May (CCPA) 136 USPQ 208 (It is our opinion that the substitution of Wille's type seal for the cement of Hallauer in Figure 1 would be obvious to persons of ordinary skill in the art from the disclosures of these references, merely involving an obvious selection between known alternatives in the art and the application of routine technical skills.); In re Cornish (CCPA) 125 USPQ 413; In re Soucy (CCPA) 153 USPQ 816; Sabel et al. v. The Wickes Corporation et al. (DC SC) 175 USPQ 3; Ex parte Seiko Koko Kabushiki Kaisha Co. (BdPatApp&Int) 225 USPQ 1260; and Ex parte Rachlin (BdPatApp&Int) 151 USPQ 56. See also Smith v. Hayashi, 209 USPQ 754 (Bd. of Pat. Inter. 1980) (However, there was evidence that both phthalocyanine and selenium were known photoconductors in the art of electrophotography. "This, in our view, presents strong evidence of obviousness in substituting one for the other in an electrophotographic environment as a photoconductor." 209 USPQ at 759.). An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960); Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

In addition, it would have been obvious to try the substitution or combination of the first and second holding region of Adams for or with the first and second holding region of Kuhns because the substitution of, or combination with, one known alternative element for or with another would

have yielded predictable results to one of ordinary skill in the art at the time of the invention; and:

> "Such a combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. … [T]he court erred in concluding that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try. … The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was 'obvious to try.'… [T]he fact that a combination was obvious to try might show that it was obvious under §103." KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007). See also, Pfizer Inc. v. Apotex Inc., 82 USPQ2d 1852 (Fed. Cir. 2007); In re Kubin, 90 USPQ2d 1417 (Fed. Cir. 2009).

Also, it would have been obvious to substitute or combine the first and second holding region of Adams for at least some of the first and second holding region of Kuhns because it would facilitate provision of the first and second holding regions of Kuhns, and substitution or combination of a known element based on its suitability for its intended use has been held to be prima facie obvious.

> See Ryco, Inc. v. Ag-Bag Corp., 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) (Claimed agricultural bagging machine, which differed from a prior art machine only in that the brake means were hydraulically operated rather than mechanically operated, was held to be obvious over the prior art machine in view of references which disclosed hydraulic brakes for performing the same function, albeit in a different environment); and MPEP 2144.07.

Still further, it would have been obvious to combine this disclosure of Adams with the disclosure of Kuhns because, as disclosed by Adams as cited, it would facilitate provision of the adhesive holding regions of Kuhns

wherein the first tackiness is less than the second tackiness "from the edges inward the adhesive strength increases."

However, Kuhns does not appear to explicitly disclose the following:

Re claims 27, 44 and 45: the second surface coarseness different from the first surface coarseness.

Re claims 27 and 44: wherein both the tackiness between the first adhesive holding region and the main body and the tackiness between the second adhesive holding region and the main body are larger than the first tackiness and the second tackiness.

Re claim 30: The substrate holder of claim 29, wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material, and the first adhesive holding region and the second adhesive holding region have different surface undulation characteristics.

Re claim 32: The substrate holder of claim 28, wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material, and the first adhesive holding region and the second adhesive holding region have different surface undulation characteristics.

Re claim 40: The substrate holder of claim 39, wherein an air outlet is provided in the second adhesive region.

Re claim 43: The substrate holder of claim 28, wherein the adhesive material comprises silicone rubber, polyurethane rubber or fluorine rubber.

Re claim 46: The substrate holder of claim 27, wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material, and the first adhesive holding region and the second adhesive holding region have different surface undulation characteristics.

Re claim 48: The substrate holder of claim 27, wherein an air outlet is provided in the second adhesive region.

Re claim 50: The substrate holder of claim 45, wherein the adhesive material comprises silicone rubber, polyurethane rubber or fluorine rubber.

Nonetheless, in the abstract and column 3, lines 33-40; column 3, line 47 to column 4, line 3; column 5, lines 4-12 and 26-32; and column 5, line 54 to column 9, line 64, Sher discloses a second surface coarseness and undulation characteristics "topography" different from a first surface coarseness and undulation characteristics, a second tackiness which corresponds to the second surface coarseness "the topography of the adhesive surface controls the performance of the adhesion interface" and is different from a first tackiness, wherein both the tackiness between a first adhesive 30 holding region "relative interior" and the main body and the tackiness between a second adhesive holding region "relative perimeter" and

the main body "interfaces" are different than the first tackiness and the second tackiness:

> [B]oth major surfaces of adhesive layer 30 can be microreplicated using the same or different liner(s) 20 to provide the same or different adhesive performance properties at the two different adhesive interfaces during use.

wherein a first adhesive holding region and a second adhesive holding region are composed of the same adhesive material "same or different adhesives having same or different topographies"; wherein an air outlet "microchannels" is provided in the second adhesive region; wherein the adhesive material comprises silicone rubber, polyurethane rubber or fluorine rubber (Wilson (5362516), column 9, lines 21-37, incorporated by reference at column 8, lines 22-35).

Moreover, it would have been obvious to combine this disclosure of Sher with the disclosure of Kuhns because it would facilitate provision of the adhesive materials, the first and second tackiness, and the tackiness between the first adhesive holding regions and the main body of Kuhns; and, as disclosed by Kuhns, as cited, it would improve adhesive properties.

Although the combination of Kuhns and Sher does not appear to explicitly disclose the tackiness between the adhesive regions and the main body is larger than the first and second tackiness, it would have been obvious to provide this particular relative tackiness because it would facilitate positioning and repositioning of the circuit board on the main body.

In any case, it would have been obvious to provide this/these relative tackiness size dimensional limitation(s) in the combination of Kuhns and Sher because it has been held that mere size dimensional limitations, including "the mere change of the relative size of the co-acting members of a known combination," are prima facie obvious absent a disclosure, as here, that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical:

> [A]ppellant does not contend that the combination of a magnetic fastener and an instrument having a magnetic head such as a tack and a magnetic hammer is new but that his particular combination is patentable because his magnetic tool is of substantially the same dimensions as the disk. … It is well established that the mere change of the relative size of the co-acting members of a known combination will not endow an otherwise unpatentable combination with patentability. Electric Cable Joint Co. v. Brooklyn Edison Co., Inc., 292 U.S. 69, 78 L.Ed. 1131, 54 S.Ct. 586, 21 USPQ 1 ; In re Irmscher, 36 CCPA 767, 171 F.2d 303, 80 USPQ 136 ; In re Bennett, 17 CCPA 1113, 40 F.2d 755, 5 USPQ 173. (In re TROIEL, 124 USPQ 502 (C.C.P.A. 1960))
>
> We do not feel that this limitation is patentably significant since it at most relates to the size of the article under consideration which is not ordinarily a matter of invention. In re Yount, 36 C.C.P.A. (Patents) 775, 171 F.2d 317, 80 USPQ 141. (In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955))

See also In re Kirke, 17 C.C.P.A. (Patents) 1121, 40 F.2d 765, 5 USPQ 539; In re Rinehart, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Also, as cited, the combination of Kuhns and Sher discloses that the tackiness between the first adhesive holding region and the main body and the tackiness between the second adhesive holding region and the main body and the first tackiness and second tackiness is a/are result effective variable(s).

Therefore, it would have been obvious to try variations of this/these result effective variable(s), including the claimed variation(s) because:

> [T]he court erred in concluding that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try. … The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was 'obvious to try.' … [A] person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. … [T]he fact that a combination was obvious to try might show that it was obvious under §103. (KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007))

See also Pfizer Inc. v. Apotex Inc., 82 USPQ2d 1852 (Fed. Cir. 2007); In re Kubin, 90 USPQ2d 1417 (Fed. Cir. 2009); In re Aller, Lacey, and Hall, 105 USPQ 233 (C.C.P.A. 1955).

Applying the same legal precedent, it also would have been obvious to try this/these particular claimed tackiness dimension(s) because a change in dimension would have been a known option within the technical grasp of a person of ordinary skill in the art.

Still further, it would have been obvious to try wherein both the tackiness between the first adhesive holding region and the main body and the tackiness between the second adhesive holding region and the main body are larger than the first tackiness and the second tackiness because a person of ordinary skill would be motivated to solve the problem of providing the tackiness of the combination of Kuhns and Sher and there are a finite number of readily identified, predictable solutions; namely, providing each of the relative tackinesses to be smaller, equal to or larger; and:

> [T]he court erred in concluding that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try. … The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was "obvious to try." … When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. … [T]he fact that a combination was obvious to try might show that it was obvious under §103. (KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007))

See also, Pfizer Inc. v. Apotex Inc., 82 USPQ2d 1852 (Fed. Cir. 2007) and In re Kubin, 90 USPQ2d 1417 (Fed. Cir. 2009).

Similarly, the genus of the relative tackinesses would inherently anticipate the species wherein both the tackiness between the first adhesive holding region and the main body and the tackiness between the second adhesive holding region and the main body are larger than the first tackiness and the second tackiness because the genus contains a relatively small

number of species, and one skilled in the art would at once envisage each species of the genus:

> [I]t has been held that a prior art genus containing only 20 compounds and a limited number of variations in the generic chemical formula inherently anticipated a claimed species within the genus because "one skilled in [the] art would... [at once] envisage each member" of the genus. In re Petering, 301 F.2d 676, 681, 133 USPQ 275, 280 (CCPA 1962) (emphasis in original). (MPEP 2144.08II4(a))

However, Kuhns does not appear to explicitly disclose the following:

Re claims 27, 44 and 45: wherein a through hole for receiving a pin is located in the first adhesive holding region so that the through hole is usable by the pin for peeling off the circuit board.

Re claim 51: The substrate holder of claim 45, wherein the adhesive holding layer is formed on the main body so that the adhesive holding layer remains on the main body upon separation of a circuit board from the holding surface.

Notwithstanding, in the English translation and abstract, and the drawings, Nishikawa discloses a wherein a through hole 4 for receiving a pin 5 is located in the first adhesive holding region 3, so that the through hole is usable by the pin for peeling off the circuit board 2; wherein the adhesive holding layer 3 is formed on the main body 1 so that the adhesive holding layer remains on the main body upon separation of a circuit board 2 from the holding surface.

Moreover, it would have been obvious to combine this disclosure of Nishikawa with the disclosure of Kuhns because it would facilitate the release of the release liner from the circuit board of Kuhns.

It is noted that the notice of abandonment mailed 09-28-09 was mailed in error. Any resulting inconvenience to applicant is sincerely regretted.

Applicant's remarks filed on 12-10-08 have been fully considered, treated supra, addressed infra, and/or adequately addressed previously of record.

Applicant asserts:

> The Examiner objects to the language "mirror face", "1S" and "1.6S" as being unclear. However, this position by the Examiner is respectfully traversed. These terms are understood by one of ordinary skill in the art as being indicators of surface coarseness.

These assertions are respectfully deemed unpersuasive because the meaning of the alleged indicators of surface coarseness is unclear.

Also, applicant argues:

> It is noted that Nishikawa was cited by the Examiner as having a through hole 4 for receiving a pin 5 for peeling off of a circuit board 2. The Examiner considered this obvious to combine with Kuhns in order to facilitate the release of the liner of Kuhns. This combination, however, makes no sense. Kuhns is directed to a tamper-indicating radio frequency identification antenna in the form of a sticker that is attached to equipment. The point of Kuhns is to provide an arrangement in which if the radio frequency identification device (RFID) is attempted to be removed, the antenna will be destroyed. In particular, note the discussion in paragraph 56 on page 7 of Kuhns. The point of having two different strength adhesives 19a and 19b is to change the amount of pull that is necessary to increase the pulling to a

> sharper radius and more likely causes fracture 28 to occur in metal powder layer 12 as shown in Fig. 4b. Kuhns does not desire to assist in any removal. Thus, Nishikawa and Kuhns are not analogous prior art. They are not in the same field, they do not address the same problems, and they have absolutely no reason why one of ordinary skill in the art would look to combine one with the other. There is no logical reason why one of skill in the art would combine these two. … Nishikawa is directed to problems that are directed to the present invention, but have no application whatsoever to Kuhns, and the combination is not logical.

These arguments are respectfully traversed because Nishikawa and Kuhns are clearly analogous art, because, as elucidated in the rejection, one of ordinary skill in the art could implement a predictable variation of Nishikawa and Kuhns, and would see the benefit of doing so, in order to arrive at the claimed invention. Indeed:

> When a work is available in one field, design incentives and other market forces can prompt variations of it, either in the same field or in another. If a person of ordinary skill in the art can implement a predictable variation, and would see the benefit of doing so, §103 likely bars its patentability. Moreover, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person's skill. (KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (U.S. 2007))

Furthermore, sufficient rationale to combine Kuhns and Nishikawa is elucidated in the rejection.

Relatedly, applicant alleges:

> Even if there were a liner to be removed from the adhesive surface of Kuhns prior to application, for example, such would not require a through hole for receiving a pin for removal of any such liner.

This allegation is respectfully deemed unpersuasive because Kuhns is not necessarily applied to the rejection for a requirement of a through hole for receiving a pin for removal of any such liner.

Also, applicant contends:

> The combination of Sher with Kuhns also is a pure hindsight reconstruction that has no logical reason in the prior art for supporting the combination.

These contentions are respectfully traversed because it has been recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning; yet, so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was conceived, and so long as it does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper. (In re McLaughlin, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971)) To this end, it is respectfully submitted that these criteria are satisfied in the rejection of the instant claims.

Furthermore, sufficient rationale to combine Kuhns and Sher is elucidated in the rejection.

Further, applicant argues:

> The Examiner takes the position that first and second adhesive holding regions 19a and 19b of Kuhns inherently corresponds to first surface coarseness and second surface coarseness. However, there is nothing to indicate from the prior art that the surface portions of these regions would be different. Applicants specifically indicate that their adhesive can be of the same material, and in the independent claims recite that the surface coarsenesses are different and correspond to different tackinesses. This is

> not necessarily the case with the prior art, however, despite the position of the Examiner. It is not inherent that the surface coarsenesses of the regions are different, as a different level of tackiness could be achieved in different ways.

These arguments are respectfully deemed unpersuasive because the scope of the claims is not limited to wherein surface portions of these regions would be different and Kuhns is not necessarily applied to the rejection for this disclosure.

Furthermore, it is not necessarily maintained in the rejection that it is necessarily the case with the prior art that the surface coarsenesses are different. Rather, it is maintained that the limitation of the second surface coarseness different from the first surface coarseness would have been obvious over the combination of Kuhn and Sher.

Applicant also alleges:

> The Examiner takes the position that it would have been "obvious to try" using the same adhesive material. Note page 12 of the final Office Action. The Examiner cites the obviousness to try a standard as recently articulated in the KSR decision. However, this applies only in a situation where there is an identified problem with a finite number of identified and predictable solutions. There is no evidence that this is the case in the present situation. There could be millions of different types of adhesives that could be used, and there is nothing to suggest using the same material for two different tackiness strengths in Kuhns. Thus, the obvious to try standard does not apply. The same is true for the Examiner's discussion on 18 page 13, continuing to page 14, of the Office Action. The same is also true for the Examiner's discussion on pages 16 and 17 of the Office Action.

These allegations are respectfully traversed because there is an identified problem, "the problem of providing adhesive material" with a finite

number of readily identified and predictable solutions, "a finite number (2) of readily identified, predictable solutions; namely, a same and a different adhesive material." Similarly, the rejection recites identified problems and a finite number of readily identified, predictable solutions at applicant's referenced sections of the Office action.

In any case, applicant has provided no evidence that KSR decision "obvious to try standard" applies only in a situation where there is an identified problem with a finite number of identified and predictable solutions; therefore, this allegation amounts to mere conjecture and is not probative. To this end, it is noted that the KSR decision merely affirms a particular proper application of the "obvious to try standard" but does not preclude application of the "obvious to try standard" outside of the particular application.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee

pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**For information on the status of this application applicant should check PAIR:**
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Alternatively, applicant may contact the File Information Unit at (703) 308-2733. Telephone status inquiries should not be directed to the examiner. See MPEP 1730VIC, MPEP 203.08 and MPEP 102.**

Any other telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (571) 272-1930. Regular office hours: Monday through Friday, 8:30 a.m. to 6:00 p.m.
The fax phone number for group 2800 is (571) 273-8300.

/David E Graybill/
Primary Examiner, Art Unit 2894